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REVIEW OF PROGRESS IN THE DEVELOPMENT OF TRANSIT TRANSPORT SYSTEMS IN THE INDIA, NEPAL AND BHUTAN SUBREGION

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ABBREVIATIONS

CDS	Calcutta Dock System
CFS	container freight station
CIF	cost, insurance and freight
CONCOR	Container Corporation of India
CPC	Calcutta Port Trust
EDIFACT	electronic data interchange for administration, commerce and transport
GDP	gross domestic product
GoI	Government of India
HDC	Haldia Dock Complex
HMGN	His Majesty's Government of Nepal
ICD	inland container depot
INR	Indian rupee
JNPT	Jawaharlal Nehru Port Trust
NR	Nepali rupee
Nu	ngultrum
NTWC	Nepal Transit and Warehousing Co Ltd.
RGoB	Royal Government of Bhutan
SAARC	South Asian Association for Regional Cooperation
TBL	through bill of lading
TEU	twenty foot equivalent unit
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme

CURRENCY

The Bhutanese ngultrum is on a par with the Indian rupee. During the course of the preparation of this study its value was approximately Nu 46.50 = 1 U.S.$.

The Nepali rupee has a fixed exchange rate with the Indian rupee of NR 1.6 = INR 1.

EXECUTIVE SUMMARY

1. This is a summary of current issues regarding the transit of Nepal's and Bhutan's trade with third countries through India. It is the result of a consulting assignment conducted by Chakra Infrastructure Consultants Private Limited for the United Nations Conference on Trade and Development in May 2001.

2. Nepal and Bhutan are landlocked Himalayan kingdoms bordered by India and the Tibet Autonomous Region of China. For both these countries the principal trading partner is India and the principal access route for the transit of trade with the rest of the world is through the port of Calcutta and its sister port of Haldia. These are situated on the River Hooghly in the State of West Bengal in Eastern India. Individual bilateral treaties between the two kingdoms and India govern bilateral trade and the movement of transit traffic.

3. The structures of the external trade sectors of the two kingdoms are neither similar nor comparable. The sizes of the two economies are different, as are their populations. This is also reflected in the totality and composition of their external trade. In the case of Nepal, although India is the main trading partner, India's share of exports and imports is approximately 30 per cent of the total. In the case of Bhutan, India's share of imports is 70 per cent and it takes 95 per cent of exports.

4. From traffic tonnage figures of the Calcutta Port Trust (CPT) we have ascertained that Nepal's current throughput through Calcutta Port is about 425,000 tonnes per year, mainly imports. Bhutan's annual throughput is about 6,000 tonnes, again mainly imports. Nepal also has a throughput of about 160,000 tonnes a year through Haldia Port. Bhutan's Haldia throughput is negligible. Nepal is a significant client for the CPT. Some 12 to 15 per cent (more in some years) of the 175,000 TEUs handled annually is Nepal cargo.

5. As mentioned earlier, the transit routes for the two kingdoms use Calcutta as the principal ocean freight node. Calcutta is a riverine port, situated 232 km from the sea. Port throughput has been affected by the reducing draft available for vessels, owning to silting in the River Hooghly. Calcutta Port handles containers at a dedicated terminal but can handle only service-geared vessels. There are feeder services between Calcutta and Singapore and, to a lesser extent, to Colombo and Hong Kong (China).

6. Haldia Port is also on the River Hooghly, 128 km from the sea. Earlier, the intention was to concentrate bulks and liquids in this port. However, the draft situation in the River Hooghly is leading to the use of this port for container traffic as well, and there has been an overall shift of traffic to this port from Calcutta. The port, like Calcutta, handles only geared vessels – on the same feeder services from Singapore and Colombo.

7. At Calcutta both Nepal and Bhutan have transit warehouses oriented towards break-bulk activities of an earlier era. The Nepalese Government has options to lease additional land from the CPT to establish better transit facilities. Nepal also leases land at Haldia Port. Transit between the ports and the two kingdoms is almost entirely by road, with Indian trucking companies dominating the activity. The distances to the main

border points of Birganj Raxaul (Nepal) and Phuentsholing Jaigaon (Bhutan) are 890 and 775 km respectively.

8. A significant feature of transport movements in India is that road freight traffic is 60 per cent of total movements in the country, with rail taking most of the balance. However, a Government company, - Container Corporation of India Limited (CONCOR) - has been intensifying movements of container traffic within the country. Much of this traffic now moves in dedicated container trains. Over 60 inland container depots (ICDs) now function in India (over half in the private sector). Many of these are linked to ports by timetabled rail services for export and import cargo. Several ports have privately operated container terminals, and a major port on the West coast near Mumbai, - the Jawaharlal Nehru Port Trust (JNPT) - now provides direct gearless container services to the rest of the world. Furthermore, many ICDs now issue and receive through bills of lading, with the Indian seaport working as a mere modal change node. Indian Customs have accepted and facilitated this change in the past four years and have introduced practices involving transmitting documents electronically with EDIFACT.

9. CONCOR has also been developing domestic container traffic streams running on timetabled schedules for container trains between important destinations. This is resulting in some high-value cargo coming back to the rail mode because of time, cost and security considerations.

10. In December 2000 a US$ 30 million (approximate cost) project was completed under the aegis of the World Bank to provide Nepal with three border facilities to handle containerized cargoes. Of these, the principal one at Birganj now has a direct rail connection to Calcutta Port through the Indian Railway broad-guage network. The other two terminals - at Biratnagar and Bhairava - are road-based. While the road-based terminals are functioning, the principal one at Birganj is moribund.

11. In the case of Bhutan, a UNDP-funded study for a dry port was completed in 1999, including design for constructing the first phase of it. Unusually heavy floods in the autumn of 2000 have affected the chosen site at Phuentsholing. The Royal Government of Bhutan is mobilizing resources to implement this project and is seeking the assistance of donor agencies.

12. In the case of Nepal, the most important issue at present is that the Birganj container terminal is in a position to physically receive block container rakes from Calcutta immediately. However, cooperative arrangements between the Government of Nepal and the Government of India are not yet in place. Until this happens the terminal cannot be used. Use of this terminal can lead to the following:

(a) A significant transfer of traffic from road to rail, reducing the transit costs (Calcutta route) from 12-15 per cent of CIF value by 8-10 per cent;

(b) If a shift is made to the JNPT port with container trams Nepal can benefit from direct sailings from its overseas traffic with a further reduction in overall costs. Furthermore, the use of a second port for substantial volumes would introduce a much-desired element of competition with the Calcutta route.

13. In the case of Nepal, operationalizing Birganj should be given the highest priority. After this the focus should be on developing containerized rail services with CONCOR and issuing and receiving through bills of lading. Since the Indian trade is only about a third of Nepal's external traffic, if the latter moves in container trains some percentage of the former will follow suit naturally.

14. In the case of Bhutan, third-country trade is insufficient justification for a dry port. However, the partial containerization of Bhutan's trade with India (it is now almost entirely break bulk) will provide the impetus for the establishment of a dry port and for the development of export and value-added import transaction industries in Bhutan.

15. To establish a dry port in Bhutan the Government may need to associate an experienced dry port and container business developer and operator who would focus on establishing the dry port and establishing transport links with CONCOR particularly arrangements for transfer to the Indian rail system immediately south of the Bhutan-India border. The aim should be to "piggy back" on existing CONCOR containerized train movement streams between the rest of India and the Eastern Indian State of Assam.

16. In conclusion, current approaches to alleviating transit problems should be to concentrate on the following:

(a) Nepal to operationalize its ICD at Birganj as a dry port and establish a significant alternative transit route through theJNPT port on India's west coast, using railways for hauling containers;

(b) Bhutan to construct and establish a dry port at Phuentsholing to stimulate its external trade sector.

A NEPAL'S EXTERNAL TRADE AND TRANSIT SITUATION

1. Introduction

17. Nepal's mid-1992 population was 19.9 million. Per capita gross domestic product (GDP) in 1999 was estimated at US$ 210. Nepal has a land area of 141,000 square kilometres. China (Tibet Autonomous Region) lies on Nepal's northern border and India surrounds it on all other sides. The country is 885 kilometres from east to west with a width of 193 kilometres from north to south. A sketch map of Nepal, which is not to scale, is contained in annexe 1.

18. There were about 13,700 kilometres of roads in the country in May 2000, of which a little less than a third were tarmac roads. Road development is relatively less in western Nepal compared with the rest of the country. There are reasonable roads between the capital city of Kathmandu and the major border crossings with India at Birganj (in the centre) at Bhairava (in the west) and at Biratnagar (in the east). There is a lateral road running, roughly, from east to west in the middle of the country. The terrain and road geometrics do not allow high speeds or high axle loads. Heavy freight vehicles (e.g. with containers) do move to Kathmandu, although trucks with capacities below 10 tonnes carry most of the goods traffic within the country. All the major

centres in the country are well connected by frequent flights, with about a dozen private sector operators. There are several direct regular and charter flights between Kathmandu and other countries.

19. Nepal's main trading partner is its immediate neighbour, India. There is also a small amount of direct trade with China (Tibet) using traditional transit routes and centres. However, Nepal also has a substantial amount of overseas trade with other countries, almost all of which transits the port of Calcutta (1,160 km from Kathmandu). Alternative routes to the sea are, theoretically, possible through China and Bangladesh. The overland distances and costs in comparison with the value of goods involved rule out any question of using Chinese ports for the transit of third-country trade. Routes from Nepal to ports in Bangladesh through Phulbari (road) and Radhikapur (rail) on the India-Bangladesh border have been formally available for some years. There is little or no traffic using these routes and the additional set of border formalities appear to make them unattractive to users.

2. Nepal's external trade

20. The monetary quantum of Nepal's external trade for the past decade is shown in table 1. It can be seen that imports have always exceeded exports. The ratio of imports to exports has fluctuated a great deal. Though it is high (2.26 in 1999-2000), there has been a consistent declining trend for the past four years.

Table 1: Nepal's External Trade in Nepali Rs '000

Year	Exports	%	Imports	%	Total trade	Trade deficit	Ratio imp/exp
1990-91	7 343 914	24.7	22 377 173	75.3	29 721 087	15 033 259	3.05
1991-92	13 838 033	31.5	30 158 859	68.5	43 996 892	16 320 826	2.17
1992-93	17 271 268	33.4	34 25 379	66.6	51 696 647	17 154 111	1.99
1993-94	19 077 495	27.3	50 735 639	72.7	69 813 134	31 658 144	2.66
1994-95	17 681 253	21.8	63 324 840	78.2	81 006 093	45 643 587	3.59
1995-96	19 758 388	20.7	75 896 306	79.3	95 654 694	56 137 918	3.83
1996-97	22 861 951	19.8	92 874 671	80.2	115 736 622	70 012 720	4.05
1997-98	27 402 244	23.6	88 894 771	76.4	116 297 015	61 492 527	3.24
1998-99	35 269 272	27.7	92 003 390	72.3	127 272 662	56 734 118	2.61
1999-00	50 959 028	30.7	114 955 149	69.3	165 914 177	63 996 121	2.26

21. Table 2 shows the values of trade with India, China (Tibet) and all other countries for the past three years. The share of trade with India has been growing – a trend that started ten years ago – but overseas trade is still more than half of both imports and exports. This underlines the importance of transit facilities for Nepal. The details of shares of the major trading partners are shown for three financial years in tables 3 and 4. The principal commodities traded are shown for two financial years in tables 5 and 6.

Table 2: Direction of Nepal's external trade in Nepali Rs (000)

Direction	1997/98	Per centage	1998/99	Per centage	1999/00	Per centage
Exports						
India	8 794 400	32.09	12 530 700	35.53	22 618 700	44.39
Overseas	17 987 216	65.64	22 180 871	62.89	27 827 917	54.61
Tibet	620 628	2.26	557 701	1.58	512 411	1.01
Total	27 402 244	100.00	35 269 272	100.00	50 959 028	100.00
Imports						
India	27 331 000	30.75	32 119 700	34.91	40 928 100	35.60
Overseas	60 461 949	68.02	58 262 294	63.33	69 838 040	60.75
Tibet	1 101 822	1.24	1 621 396	1.76	4 189 009	3.64
Total	88 894 771	100.00	92 003 390	100.00	114 955 149	100.00
Trade deficit						
India	18 536 600	30.14	19 589 000	34.53	18 309 400	28.61
Overseas	42 474 733	69.07	36 081 423	63.60	42 010 123	65.64
Tibet	481 194	0.78	1 063 695	1.87	3 676 598	5.75
Total	61 492 527	100.00	56 734118	100.00	63 996 121	100.00

Table 3: Country-wise share of imports (per centage)

Country	1997/98	1998/99	1999/00
India	30.75	34.91	35.60
Switzerland	2.12	8.20	8.87
China	4.69	3.95	7.26
Singapore	14.22	10.52	6.97
Hong Kong (China)	10.44	5.38	5.92
Kuwait	NA	NA	2.59
Japan	3.10	2.45	2.52
Rep. of Korea	2.09	2.13	2.43
Indonesia	NR	NA	1.95
Thailand	1.95	NA	1.92
United Arab Emirates	4.86	3.01	NA
New Zealand	NA	1.94	NA
Malaysia	NA	1.93	NA
Saudi Arabia	2.14	NA	NA
Subtotal	76.36	74.41	76.02
Other countries	23.64	25.59	23.98
Grand total	100.00	100.00	100.00

Table 4: Country-wise share of exports (per centage)

Country	1997/98	1998/99	1999/00
India	32.09	35.53	44.39
United States	25.93	26.99	26.84
Germany	24.86	22.17	14.74
United Kingdom	1.16	1.48	2.34
Belgium	NA	0.80	1.59
France	1.78	1.36	1.44
Japan	NA	NA	1.38
Hong Kong (China)	NA	NA	0.99
Switzerland	0.86	0.80	0.82
Spain	NA	NA	0.59
Bangladesh	2.17	3.68	NA
Italy	1.69	1.09	NA
Austria	1.20	0.94	NA
Sri Lanka	1.10	NA	NA
Subtotal	92.84	72.13	49.92
Other countries*	7.16	5.16	4.87
Grand total	100.00	100.00	100.00

Table 5: Principal exports

Commodity	1998/99	1999/00
Woollen carpets	9 927 360	10 404 709
Readymade garments	8 154 920	11 082 558
Hides and goatskins	271 064	193376
Tea	30 082	25 722
Essential oils	9 488	9 617
Niger seeds	97 663	13 464
Pulses (lentils)	913 413	77 675
Handicrafts	298 837	309 267
Silverware & jewellery	142 882	120 318
Woollen & pashmina goods	730 123	3 877965
Towels	366 869	415 851
Wooden & bamboo goods	20 363	24 410
Paper & paper products	123 108	203 734
Micro transformers	53 510	55 692
Buttons	9 384	8 111
Total	22 180 871	27 827 917

Table 6: Principal imports

Commodity	1998/99	1999/2000
Machinery & parts	3 833 827	3199 262
Fertilizers	1 971 553	1 900 015
Raw wool	1 680 440	1 382 781
Transport equipment	1 457 533	1 707 822
Aircraft & spare parts	1 000 858	1 875 728
Textiles	305 089	397 257
Threads	418 739	1 039 007
Electrical goods	2 323 270	3 262 739
Steel Rods & sheet	801 626	2 693 741
Raw silk	786 172	719 538
Chemical	1 211 583	800 107
Polythene granules	1 082 381	1 605 257
Telecom equipment	1 029 916	947 942
Edible oil	1 638 353	1 020 476
Milk (skimmed, powder & condensed)	95 202	98 867
Copper	624 333	1 297 623
Video television	141 510	426 931
Readymade garments	327 944	368 347
Palm oil	758 132	1 619 868
Computer & parts	642 172	886 670
Coconut oil	28 646	109 492
Dyes	124 814	128 231
Gold	8 024 197	7 919 252
Silver	377 849	457 343
Betel nut	547 769	715 762
Petroleum products	12 442 060	15 738 298
Others	14 586 326	17 519 684
Total	58 262 294	69 838 040

22. It can be seen that imports are diversified and several commodities have similar shares of total imports in the top rung. This is not the case of exports, wherein two commodities woollen carpets and readymade garments dominate currently Nepal's exports.

3. Treaties with India

23. Treaties between Nepal and India govern the arrangements for trade between the two countries, as well as transit of third-country goods through India. These are valid for five years at a time and are renewed automatically. Under the Treaty of Trade, 22 border points have been designated for formal trade. Nepal extends various reductions in the rates of duties on goods imported from India. The Government of

India (GoI) refunds to His Majesty's Government of Nepal (HMGN) the Indian excise duty on goods imported from India. India also provides duty-free access, without quantitative restrictions, to the Indian market for all Nepalese manufactured articles, barring a short negative list.

24. Under the Treaty of Transit, India provides port facilities at Calcutta and Haldia for Nepal's trade with third countries. Fifteen transit routes to Calcutta/Haldia are specified. It has also been agreed that Nepal can use the facilities at Bombay Port (including the newer container port at Nava Sheva the Jawaharlal Nehru Port Trust (JNPT) - and Kandla Port for third-country trade. No Nepal traffic currently uses either JNPT or Kandla Ports. As mentioned earlier, a route for trade and transit through Bangladesh has also been agreed, but is also not being used.

25. A third agreement is also in force to control unauthorized trade, particularly in relation to narcotics and psychotropic substances.

4. The ports of Calcutta and Haldia

26. The Calcutta Port Trust (CPT) comprises the Calcutta Dock System (CDS) and the Haldia Dock Complex (HDC). CDS is on the banks of the River Hooghly, 232 km from the sea. The Haldia docks are 128 km from the sea on the same river and constitute a port for bulk and liquid cargoes. Though Calcutta Port has the advantage of being inland from the sea, it has the disadvantage of being constrained to accept vessels with a maximum draft of about 7.2 m, depending on the tide. This effectively means that Calcutta is serviced by smaller feeder container vessels from large trans-shipment ports in Singapore, and, to some extent, Colombo and Hong Kong (China). However, at the present time, the phenomenon of container feeder services also prevails at most other Indian ports. The singular exception is JNPT.

27. There was a persistent fall in river draft during the period from September 2000 to February 2001, presumably owing to unprecedented flood wash and less inflow from Farakka, where a barrage on eastern branch of the Ganges brings additional water to the River Hooghly (which is the western outlet of the Ganges to the sea). The draft at HDC is on average 8-8.5 m and that at CDS 6.5-7.2 m. A capital dredging project is currently under way to enhance the draft at CDS to an average of 8 m and at HDC to an average of 10 m.

28. Unless the draft is sustained at the level indicated, CDS is likely to lose a large amount of cargo because of the size of vessels that can navigate the river, including geared container feeder ships, containers being the most important traffic at CDS. From the figures in table 7 it can be seen that this is already happening. With regard to draft, HDC has a rival port at Paradeep in Orissa, where the average draft is 12 m and above. This suits the sizes of vessels used for handling bulk cargo.

29. Nevertheless, CDS has a modern, recently constructed and well-run container wharf and has responded positively to world-wide trends of cargoes moving on ocean-going vessels in containers rather than break bulk. Containers on vessels are handled at several berths in the port in addition to the dedicated container terminal. The port is also gradually taking steps to do away with restrictive labour practices in cargo handling. It has evolved a comprehensive electronic data processing system that allows

better management information, as well as exchange of digitized information with clients and ships. The Customs at this port allow Indian importers and exporters to use electronic data interchange with EDIFACT - the UN protocol for Electronic Data Interchange for Administration, Commerce and Transport.

30. At CDS container handling equipment has increased over the last 5 years to 8 reach stackers, 3 rubber-typed gantries, 2 top lift trucks and 5 medium-capacity fork lift trucks. A number of clearing and forwarding agents also have their own equipment. Nevertheless, equipment availability is a persistent problem and there are numerous complaints from port users on this score.

31. There is a plan to privatize berths adjacent to the container terminal at CDS, with the private sector bringing in equipment. However, there has not been any major progress in this matter. At HDC three berths are earmarked for private participation. Furthermore, CPT has recently advertised for consultants to study the corporatization of HDC.

5. Nepal port traffic transit facilities at Calcutta and Haldia

32. The throughput in the Calcutta Dock System and at Haldia for recent years is shown in table 7.

Table 7: Traffic in Calcutta and Haldia Ports (in tonnes (000)

Traffic	1998-1999		1999-2000		2000-2001	
	CDS	HDC	CDS	HDC	CDS	HDC
Break bulk & others	1 495	8 738	1 469	9 437	872	12 077
Container (in TEUs)	132 291	27 951	147 299	28 321	137 845	50 882
POL & liquid bulk	5 696	11 059	5 622	10 841	3 665	10 034
Total with TEU @ 14 t	9 043	20 188	9 153	20 674	6 467	22 823
CPC total	29 231		29 828		29 290	

33. The quantum of Nepal goods transiting Calcutta port in recent years is shown in tables 8 and 9.

Table 8: Nepal imports transiting Calcutta and Haldia Ports (in tonnes)

Commodity	1998-1999		1999-2000		2000-2001	
	CDS	HDC	CDS	HDC	CDS	HDC
Liquid bulk	96 816	-	115 778	-	97 678	12 737
Containerized cargo	269 514	400	333 793	298	277 947	6 530
Fertilizer	*	*	*	*		78 203
Steel	*	*	*	*	20 693	
Others	62 242	121 923	98 884	181 397	8 066	56 300
Total	428 572	122 323	548 455	181 695	404 384	153 770

*Figures included in "others" category

Table 9: Nepal Exports Transiting Calcutta and Haldia Ports (in tonnes)

1998-1999		1999-2000		2000-2001	
CDS	HDC	CDS	HDC	CDS	HDC
31 328	6 487	25 454	7 255	22628	8 190

34. CDS handles about 6.5 million tonnes of traffic each year and imports are the predominant direction. There has been a shift of traffic from CDS to HDC. A substantial part of the general cargo throughput in the CDS is containerized. Furthermore, most containerized cargoes move through the dedicated container terminal. The number of containers handled at CDS was increasing at a high rate until 1996-1997 and since then there has also been a shift of container traffic to Haldia, owing to the reducing river draft.

35. Nepal's throughput through CDS is about 425,000 tonnes per year, mainly imports. Nepal now also has a throughput of about 160,000 tonnes a year through Haldia Port. If consider bulk and liquid cargo are not taken into account, Nepal traffic constitutes a significant customer for CPT on the whole. Nepal's containerized traffic constitutes a substantial portion of the containerized throughput of Calcutta and Haldia ports, as much as 12 to 15 per cent of it. The management of the port recognizes that Nepal's traffic constitutes a very important market segment for it. Furthermore, they are aware that this traffic transits the port for historical reasons and because of Calcutta's proximity to Nepal. They are also aware that, in order to maintain this long-term relationship with Nepal, it is necessary to provide efficient and cost-effective services at the port.

36. Nepal has a shed at Kidderpore Dock I and the top floor of one shed at Kidderpore Dock II (both at the CDS) for transit consignments. At Calcutta, in the immediate vicinity of the port, outside the container terminal, HMGN also has a warehouse on land leased from the Calcutta Port Trust through the agency of its Government undertaking, the Nepal Transit and Warehousing Company Limited (NTWC). Representatives of the latter company, as well as HMGN's Consul General at Calcutta, believe that the warehouse should be capable of stuffing and de-stuffing containers so that consignments that are delayed in the port (owing to lack of papers or for any other reason) can be stored at this location and the payment of heavy demurrage charges avoided. As the warehouse already exists, it is necessary only to arrange for the site itself to be prepared and strengthened to accept a container-handling reach stacker. The site is half a hectare in size and therefore will be able to store 84 TEUs at a time.

37. For some time now HMGN has been discussing the question of obtaining additional land from the CPT at the back of the port area of Kidderpore Docks numbers 26, 27 and 28. Space is available there, and since Nepal traffic is important for the port, it should be possible for an accommodation to be reached. However, the present situation where container traffic is likely to shift gradually to Haldia (owing to the River's Hooghly reducing draft) negates the idea of increasing transit infrastructure at CDS. It would be better to arrange improved handling facilities at Haldia.

38. At HDC, NTWC leases a plot from CPT inside the port premises. Just outside the docks, an Inland Container Depot (ICD) has been recently developed in the private

sector and is being used by Nepal transit cargo. At the leased site inside the port it will be possible to expand storage in a modular fashion, depending on Nepal's requirements. Nevertheless, it should be possible to start activities with HMGN at the site already available. Also, it is possible that a combination of infrastructure measures (a dry port in Nepal, container trains) and improved facilitation would reduce the requirement for large storage areas for Nepal goods at Calcutta.

39. None of the areas mentioned above (other than the ICD at Haldia) has typical facilities for container stacking or handling equipment. They are geared to a break-bulk era. For containers, all operations are dependent on port-based common user facilities. As mentioned, HMGN is very keen to improve its storage facilities, and its Consul General in Calcutta has been in contact with CPT to augment facilities. They are also in touch with the Container Corporation of India (CONCOR), a subsidiary of the Indian Railways, which would like Nepal transit cargoes to make use of their Cossipore ICD facility (some 10 km outside Calcutta Port and connected by rail and road to both CDS and HDC). The aim is to have these systems in place to service the ICD that has been constructed at Birganj in Nepal, using rail transport between Calcutta Haldia and Nepal.

6. Transit route between Nepal and Calcutta/Haldia

40. Nepal's external trade traffic is largely containerized for the journey by sea. Many of the goods also move on the overland transit leg between Calcutta and Nepal in containers, although stuffing and de-stuffing of containers takes place at the port. The volumes of containers are such that good container transit arrangements between Calcutta Port and Nepal can be justified. Nepal has road and rail links to Calcutta and the main border point is Birganj (Nepal) and Raxaul (India). After a programme of gauge conversion was intensified in 1991, Raxaul has been connected to Calcutta on the broad gauge (1,676 mm) network.

41. Transit between Calcutta and Nepal currently takes place mainly by road. The cost of sending a container by road to Kathmandu is Indian Rupees (INR) 45,000 and INR 30,000 to Birganj. The cost of moving a container to Raxaul by rail is between INR 15,000 and 20,000 per TEU (including an empty return). CONCOR experimented with running container trains between Raxaul and Calcutta during 1996 and 1997. Unfortunately, the service did not attract enough customers. One of the reasons for this was the absence of a proper facility to trans-ship and handle containers, in the manner of a dry port, at Birganj, the principal entry and exit point for Nepal's transit traffic through India.

42. In December 2000 a US$ 30 million (approximate cost) project was completed under the aegis of the World Bank (with inputs from GoI to provide a railway link at Birganj) to establish three border facilities in Nepal to handle containerized cargoes. Of these, the principal one at Birganj now has a direct rail connection to Calcutta Port through the broad gauge network of the Indian Railway. The other two terminals -at Biratnagar and Bhairava - are road-based. These are functioning, whereas the principal one at Birganj is moribund.

43. The most important fact at the present time is that the Birganj container terminal is in a position to physically receive block container rakes from Calcutta immediately. However, the terminal cannot be used until cooperative arrangements between the

Government of Nepal and the Government of India are in place. Use of this terminal can lead to the following:

- A significant transfer of traffic from road to rail, reducing the transit costs (Calcutta route) from 12-15 per cent of CIF value by 8-10 per cent. The journey time between Calcutta and Birganj in transit could be reduced from 10 days to 3.

- If a shift is made to JNPT port with container trains Nepal can benefit from direct container ship sailings for its overseas traffic with a further reduction in overall costs. Transit costs could be reduced by US$ 400 per TEU, by avoiding trans-shipment at Singapore and the feeder service. A recent report in the financial press stated that container slots on the India-Europe route were sold at the Delhi ICD with prices changing every hour – and these had dropped by 40 to 45 per cent over two years owing to competition.)

- Approximately 10 days would be saved in transit per consignment and this would improve the marketability of Nepali goods, even if the resulting direct cost reduction was not substantial.

- The use of a second port for substantial volumes would introduce a much desired element of competition for the Calcutta route.

44. Once a facility at Birganj starts functioning it should be possible to use block train movements between Calcutta and Birganj to handle the throughput. These movements will be justified since, even at present annual levels of traffic of 25,000 TEU, a train between the two points could operate every day. This would reduce the cost of transportation by about INR 12,500 per TEU, i.e. at least US$ 5 million a year at present traffic levels.

45. After Birganj has been operationalized the focus should be on issuing and receiving through bills of lading (TBLs). The advantages of issuing and receiving TBLs at a dry port are well known. The most important of these is that they reduce to a minimum Customs and clearance activities at seaports that are en route, with only the transport activities of transit being emphasized. If all documents are in order cargoes currently spend three to five days at the port. This could be reduced. In other words, Nepal traffic at Calcutta (or JNPT in the future) should be dealt with in the same way it is dealt with at Singapore Port.

46. Transmitting documentation electronically using EDIFACT would facilitate such an arrangement. Many ICDs now issue and receive TBLs with the Indian seaport functioning as a mere modal change node. Indian Customs have accepted and facilitated these changes in the past four years and have introduced practices involving the electronic transmission of documents using EDIFACT at the ICDs (imports and exports to and from Delhi, for example). The shipping trade will need to be convinced of the viability of the land transport leg to issue TBLs to and from Birganj. This will come about as soon as the container rail services to Calcutta (and JNPT) start.

47. Finally, containerized rail services with CONCOR for the Nepal-India trade should be developed. Since the Indian trade is only about a third of Nepal's external traffic, if the latter moves in container trains some percentage of the former will follow suit naturally. A significant feature of transport movements in India is that road freight traffic is 60 per cent of total movements in the country, with rail accounting for most of the balance. However, CONCOR has been intensifying movements of container traffic within the country, focusing on increasing the rail share of this traffic. Much of this traffic now moves in dedicated container trains. Over 60 ICDs now function in India (over half in the private sector). While the initial activities dealt with external trade, CONCOR has also been developing domestic container traffic streams running on timetabled schedules for container trains between important destinations. This is resulting in some high-value cargo coming back to the rail mode for time, cost and security reasons.

48. A dry port with proper container-handling facilities is not available at Kathmandu. Considering that the export and import traffic through Birganj is already at least in the range of 15,000 TEUs a year and that this figure may double in a period of five to seven years, it would appear reasonable to work towards establishing a dry port at Kathmandu, which is the major traffic generation centre in Nepal. The aim should be to ensure that TIRs can be issued and that containers can transit India with a minimum number of formalities. During discussions with representatives of Chambers of Commerce the view was expressed that it should be possible for the private sector to develop these dry ports, including mobilizing funds for it, after the Birganj terminal is commissioned. Clearing and forwarding capabilities could also be expanded quickly. The establishment of a dry port at Kathmandu would require about US$ 4 million, exclusive of the costs of land.

49. An issue that needs to be addressed is the status and capability of the road transport industry in Nepal. Currently, about 3,000 trucks are involved in the transit haulage of Nepal's goods between Calcutta and Nepal. Not more than 5 per cent of these are Nepali-owned (even if the trucks are registered in India). Opening the Birganj terminal and transferring traffic from road to rail between Birganj and Calcutta Haldia would impose in a large, new workload on Nepal-based transporters for internal movement of goods, which is currently catered for by India-based trucks. (The Indian trucks in this sector could easily be redeployed in India on other traffic streams.) HMGN has no plans to facilitate an expansion of internal road haulage capabilities to synchronize with the commissioning of the Birganj dry port. Clearly, there will be an interim period when Indian trucks may need to take up this activity while the industry in Nepal expands to fulfil the new demand.

7. Other major issues regarding Nepal transit traffic

50. Though the overall trend of trade and transit activities between India and Nepal has generally been cordial and cooperative in the past 50 years, there have been fluctuations, based on the two countries' perceptions of the nature of the problems encountered. Prior to 1991, Indian import policies had tariff and quantitative restrictions on a wide range of consumer products. The perception of the transit country (India) was that a great deal of Nepal imports transiting the country tended to leak back into the Indian economy. Therefore, considerable restrictions and Customs procedural requirements were applied to such cargoes.

51. Since 1991 India has reduced quantitative restrictions and tariff barriers for a wide range of consumer goods and the volume of Indian imports has increased substantially. As a result, even if there continues to be leakage of some of Nepal's imports into the Indian economy, the magnitude of this is small when compared with the current level of Indian imports. The absence of major import restrictions in India also makes this activity a less viable proposition than in the past.

52. This has generally resulted in a more eclectic set of regulations governing Nepal transit cargoes moving through Calcutta Port and at Raxaul. For example, when Customs' seals are intact on containers very few percentage checks are undertaken for verification of contents. It is envisaged that similar positive measures will increase over the years to improve the facilitation of transit cargoes. However, alignment of documentation between the transit country and the landlocked State will generally assist in reducing the burden of paper work. This will be particularly so if documents can be generated prior to the arrival of a ship with inputs based on systems developed by UNCTAD in other developing countries. The language used, for example, should be in the EDIFACT format which is increasingly being adopted at ports and Customs offices worldwide.

53. Therefore, a specific technical assistance project is recommended that should seek to incorporate EDIFACT transmission capabilities and formats in Nepal import and export cargo documentation. To the extent possible, this should be aligned with Indian Customs EDIFACT-compatible documents in use at Calcutta and JNPT.

54. Transit to and from Nepal is subject not only to the Indian Central Government regulations and formalities but also to those that are in force in local Governments. In this context, owing to enforcement in the States of Uttar Pradesh, Bihar and West Bengal of minimum freight tariffs for the transportation of Nepalese cargo, Nepal has not been able to benefit from the prevailing Indian road freight market, which in general is very competitive.

B: BHUTAN'S EXTERNAL TRADE AND TRANSIT SITUATION

1. Introduction

55. The Kingdom of Bhutan is a landlocked country in the Eastern Himalayas in South Asia. It has an area of 47,000 square kilometres and its population in 1996 was about 0.62 million. Its per capita gross national product was approximately US$ 485 in that year. Bhutan's northern border is with China (the Tibet Autonomous Region) and the rest of the country is surrounded by India. The average width of the country is approximately 140 km. The country has three distinct physical areas. There is a narrow strip running parallel to the southern border with India that is undulating but of low elevation. A wider middle stretch, also running from east to west, is mountainous but inhabited. The northern part of the country is above the snow line and is barren tundra. A sketch map of Bhutan, which is not to scale, is contained in Annexe 2.

56. There are about 2,500 km of roads in the country. There are three north-to-south links connecting Bhutan to its border with India. A lateral road running, roughly, from east-to-west in the middle of the country connects these. Roads are in good condition, but the terrain and road geometrics do not allow high speeds or high axle loads. Heavy freight vehicles (e.g. with containers) move by exception. Normally, trucks with capacities of below 10 tonnes transport goods.

57. For all overseas trade, i.e. other than that from and to India, Bangladesh and Nepal, the main port used by Bhutan is Calcutta (775 km from the main border crossing of Phuentsholing (Bhutan) Jaigaon (India). The reasons for this are its geographical proximity and historical ties between India and Bhutan that facilitate the use of this port. Most landlocked countries like to have alternative routes to the sea if this is feasible. Theoretically, it is possible for Bhutan to utilize Mongla or Chittagong ports in Bangladesh, but this requires transiting Indian territory with an additional set of border crossing formalities. A study conducted on 1995 trade statistics estimated that the weight of Bhutan's imports transiting Calcutta would not have exceeded 4,500 tonnes in that year and that exports through the port would not have been more than 1,000 tonnes. Thus, it is not worth while at present for Bhutan to establish an alternative route.

58. One alternative mode for travelling to and from external destinations already exists of using air transport. The national airline - Druk Air - serves Bangkok, Calcutta, Dhaka, New Delhi and Kathmandu from Paro. The Royal Government of Bhutan (RGoB) has long-term plans to build a new international airport at a suitable site either at Phuentsholing or Geylegphug. Bhutan already uses its scheduled flights to import small volumes of goods from overseas destinations. Again, Calcutta is a major intermediate transit point for air cargoes. However, it is possible to import goods through airports other than Calcutta. The normal cost penalties for air transportation apply, in that only high-value, low-weight commodities can normally bear the costs of such transportation. Furthermore, the current airport site at Paro leads to hot and high altitude situations that imply penalties on weights that can be carried and restrictions on types of aircraft that can operate from the airport.

2. Trade statistics

59. Table 10 shows the main entry points into Bhutan for trade with its neighbours and the rest of the world with their share of Bhutan's trade in 1997.

Table 10: Main trade gateways in Bhutan

Gateway	Percentage of Trade
Phuentsholing	81
Samdrup Jongkha	7
Samtse	7
Gelephu	4
Thimphu	1

60. The overall balance of trade for Bhutan is negative. A comparison of figures for 1995 and 1997 indicates that the adverse trade balance has increased to Nu 704 million from Nu 293 million. The balance of trade with reference to India is positive and improved from Nu 449 million in 1995 to Nu 588 million in 1997. Consequently, the balance of trade with countries other than India is negative, increasing from Nu 742 million in 1995 to Nu 1,292 million in 1997. The long-term total trade trend indicates a substantial increase. Overall trade increased from Nu 2,597 million in 1989 to Nu 9,252 million in 1997, indicating a compound growth rate of 17.21 per cent per annum for the eight-year period.

61. Table 11 shows the trend in total trade between Bhutan, India and all other countries since 1989.

Table 11: Bhutan's trade with India and third Countries (in Nu millions)

Year	India	Third countries	India's share (%) of total trade
1989	2200.7	396.3	84.74
1990	2154.3	406.1	84.14
1991	2989.5	686.6	81.32
1992	3201.2	1854.1	63.32
1993	3716.3	1019.4	78.47
1994	3997.1	962.0	80.60
1995	5709.1	1281.9	81.66
1996	6123.2	1955.8	75.79
1997	7495.6	1756.6	84.04
1998	7796.6	2175.4	78.18
1999	10556.5	2266.3	82.33

62. During the period 1988-1997, overall trade with India grew at the rate of 16.55 per cent per annum, which is slightly lower than the overall trade figures. Trade with third countries increased at a much higher rate of 20.46 per cent per annum. Table 11 also indicates that India's share in Bhutan's foreign trade is decreasing, although there was a recovery in 1997.

63. Table 12 shows Bhutan's trade with different parts of the world. The percentage shares of overall exports for 1997 indicate that South Asian Association for Regional Cooperation (SAARC) countries account for 99.37 per cent. The remaining part of Asia including Hong Kong (China), Japan, Malaysia, Singapore, Thailand and Taiwan (Province of China), account for only 0.34 per cent. Japan accounts for the bulk of those exports. The shares of Europe and the United States of America are even smaller share of 0.17 and 0.12 per cent respectively.

Table 12: Bhutan's trade in 1997
(in Nu '000)

Region	Imports	Exports
SAARC Nations	3494741	4247183
Asia	1204373	14713
Oceania	41134	0
North America	30531	5057
Europe	205946	7228
Others	1219	0
World	4977944	4274181

64. Overall, SAARC countries accounted for 70.2 per cent of the value of imports, of which India accounted for 69.38 per cent. The Asian region, apart from the SAARC countries, accounted for 24.19 per cent, the figures for Japan, Singapore and Thailand being 4.19 per cent, 2.81 and 2.64 per cent respectively. With regard to individual countries, India dominated the export scene in 1997 by absorbing 94.57 per cent of Bhutan's exports. Bangladesh was the next largest destination for exports with 4.2 per cent and Nepal with 0.60 per cent was third. The above figures indicate that apart from India, Bangladesh, Nepal and Japan, trade with other countries is very small. Bhutan's exports to Asian countries other than SAARC countries are minimal, although imports from these countries are increasing.

65. The main commodities imported and exported by Bhutan in 1997 are indicated in tables 13 and 14.

Table 13: Main commodities imported in 1997
(in Nu millions)

Commodity	Value
Electrical machinery	880
Mineral fuels and oils	634
Motor vehicles and parts	559
Mechanical machinery	334
Cereals	327
Wood products	180
Beverages	150
Edible oils	134
Iron and steel	131
Iron and steel products	106
Others	1543
Total	4978

Table 14: Main Commodities Exported in 1997-1999
(in Nu million)

Commodity	1997	1998	1999
Electrical energy	1287	1338.7	2018.4
Calcium carbide	546	583.6	537.5
Ferro-silicon	489	462.1	534.3
Portland cement	370	546.9	534.8
Particle board	329	285.8	194.3
Timber	212	NA	NA
Oranges	179	142.4	128.6
Processed fruit products	134	NA	NA
Apples	82	42.00	65.7
CKD furniture	68	NA	NA
Others	616	NA	NA

66. The volume and the value of Bhutan's trade with India are shown in table15.

Table 15: Bhutan-India rade in 1997

Sec	Commodity	Imports		Exports	
		Quantity	Value	Quantity	Value
1	Live animals and animal products	2 399 064	122 898 465	10 648	333 758
2	Vegetables, fruits, coffee, tea, etc.	62 564 711	412 744 846	38 802 415	288 831 609
3	Vegetable fats & oils	3 884 794	127 581 154	0	0
4	Prepared foodstuffs	6 975 394	261 194 638	7 639 036	198 347 678
5	Mineral products and energy	109 774 205	626 025 429	236 987 777	1 760 335 452
6	Products of chemical industries	9 005 999	235 657 786	26 225 076	582 948 642
7	Plastic and rubber products	1 048 807	100 171 452	245 911	14 398 153
8	Raw hides and skins	43 078	3 929 316	170 440	3 075 351
9	Wood and wood products	35 405 834	164 542 956	2 348 335	579 924 631
10	Wood pulp products	2 180 620	93 990 091	22 090	197 596
11	Textiles	341 113	120 565 254	0	2 050 043
12	Footwear, and clothing accessories	944	50 850 839	0	0
13	Stone, plaster, cement, etc. products	41 776 463	83 105 009	3 208 718	6 724 999
14	Precious or semi-precious stones	1 685	290 035	0	0
15	Base metals and base metal products	10 400 930	270 951 370	17 622 748	498 987 033
16	Machinery & mechanical appliances	3 343 605	359 781 288	871 552	36 851 792
17	Transport equipment	354 641	340 956 488	13 670	302 000
18	Optical, photographic etc. equipment	120 380	41 099 015	0	0
19	Arms and ammunition	0	169 500	0	0
20	Miscellaneous manufactured articles	396 029	36 873 604	1 341 147	68 631 862
21	Works of art, antiques etc.	614	208 375	0	0
	Total	**290 018 910**	**3 453 586 910**	**335 509 563**	**4 041 940 599**

Note: Quantities are expressed in kg, values in Nu. These tonnage statistics are not comprehensive. However, trade with countries other than India is not more than 1 per cent by weight.

67. Bhutan imports from India to the extent that it does because of the proximity and size of the market in the country, access, traditional ties and its currency links. It should also be noted that Bhutan exporters have an advantage in the Indian market in that Indian excise duties are not applicable to them on manufactured or processed goods. The higher costs of transport to the Indian States that are not immediate neighbours of Bhutan are offset by this factor and thus extend the geographical reach of Bhutan's exports.

3. Treaties and the transit route in India

68. Bhutan's transit arrangements with India are based on a treaty signed between the two Governments in 1949. The treaty has been amplified from time to time by agreements on trade and commerce. As in the case of Treaties with Nepal these are valid for five years and renewed automatically. Trade routes, import procedures and so forth are specified in the protocol. The external trade of Bhutan is not subject to Customs duties and trade restrictions by Indian authorities when it pertains to third countries.

69. In practice, for Bhutan's imports and exports through Calcutta all transit activities take place under the control of a representative of the Royal Bhutan Customs. Owing to this arrangement, there is almost no activity involving the Indian Customs in the clearance of Bhutan cargo at Calcutta Port. There is, therefore, no requirement for insurance for goods in transit. This is in contrast to Nepal cargoes, which do not receive similar facilitation, although as mentioned earlier Bhutan's intrusive checks have been gradually decreasing in number. Bhutan's volumes of bilateral trade and transit traffic of Bhutan with India are much less than those of Nepal with India; the entire range of issues and problems in the case of Bhutan is significantly smaller than in the case of Nepal.

70. In general, Calcutta Port is becoming increasingly containerized. This is in response to worldwide trends in shipping. Cargoes that move on the inland leg of a transit route break bulk, tend to be stuffed and de-stuffed in containers at ports. It is becoming increasingly common for the seaward leg to be handled in containers.

71. The normal practice is for Bhutan imports to be unstuffed in Calcutta Port and for the cargoes to move break bulk, with a transit pass, to Bhutan by road. There the entry point is the border post of Phuentsholing, which is contiguous with the Indian town of Jaigaon. In some cases containerized goods also enter into Bhutan by truck.

72. However, since roads in Bhutan generally permit only trucks of lower tonnage to operate, trucks with cargoes from Calcutta are normally unloaded at Phuentsholing and redistributed in Bhutanese trucks of smaller capacity using the country's road network. It is rare for cargoes to go through to a destination within Bhutan in the same truck that brought them from Calcutta. These exceptions, which also sometimes include the movement of containers, are generally connected with specific capital projects such as dams or new factories.

73. As in the case of Nepal transit traffic, Bhutan's goods are also subject to local pressure groups. The same trucking cartel decides on trucking rates in a manner that is

not possible for internal traffic in India. Transit time for Bhutan's cargo, i.e. travel time and time spent in the port, is similar to that for Nepal's goods.

4. Transit facilities in Calcutta and the Bhutan dry port

74. In Calcutta RGoB maintains a warehouse under the control of its Customs Liaison Officer. This warehouse is used to store cargoes that are shipped both by air and by sea. However, since Bhutan's throughput through CDS is small the size of the facility is not a major issue. The trend of feeder container services touching HDC and not CDS can become a potential problem. It may become necessary for RGoB to arrange for container-holding arrangements at the private ICD outside Haldia Port.

75. The concept of establishing a dry port in Bhutan evolved from a series of workshops held during 1996 by RGoB with the assistance of the United Nations Development Programme (UNDP) to identify economic sectors and activities that would increase private sector participation in the economy. A consensus emerged that a dry port should be established in Bhutan to reduce the transaction costs of external trade and provide an impetus to the growth of exports.

76. A dry port can be envisaged as a publicly accessible facility equipped with appropriate cargo-handling and storage facilities under Customs control, with associated capabilities for clearing and forwarding goods, warehousing, transshipment, transit etc. A dry port provides the same facilities as a seaport, except that it functions at a landlocked location. For a dry port to be attractive it must be efficient and streamlined.

77. UNDP funded technical assistance in 1999 for studying the dry port in detail and providing designs for implementation of the fist phase. Its principal outputs were: -

- Recommending the best site for locating the dry port;
- A feasibility study of the project;
- Detailed designs and tender documents for Phase I;
- A study of Customs activities in the context of the dry port;
- A study of transport links required for the dry port.

78. The study found that although current volumes of third-country trade (in the main, trade other than with India) do not justify a dry port in Bhutan on its own, the project would be justified if a part of Bhutan's trade with India were to be containerized (it is now almost entirely break bulk). This will provide the impetus for the establishment of a dry port and for the development of export and value-added import transaction industries in Bhutan.

79. The growing phenomenon of rail-based internal container traffic in India provides a framework for developing the Bhutan dry port. Though, as mentioned, the emphasis in India had been on port-based traffic streams, domestic container traffic has been increasing and all the participants are trying to increase the movement of domestic goods by containers. Container trains already operate on regular timetables exclusively for domestic cargo between destinations such as Bangalore and New Delhi and Bangalore and Calcutta. The Bhutan dry port can use this distribution channel.

80. For example, an ICD exists at Guwahati in Assam, south-east of Bhutan. During discussions, CONCOR indicated that traffic from Guwahati is seasonal (tea) and predominates over inward movements. CONCOR is seeking to develop traffic streams in the eastern region of India. If Bhutan were to "piggy back" on this arrangement there could be a synergy of mutually beneficial activities between growing internal containerization in India and the Bhutan dry port. Considering that two to three years will pass before the dry port starts operating, there is enough time to establish arrangements with CONCOR and other ICD operators regarding development of traffic streams in the eastern areas of India. Even if 20 per cent of the current Indo-Bhutan trade were to use the container mode, "piggy backing" on existing CONCOR containerized train movement streams between the rest of India and Assam, this could generate a traffic volume of around 50,000 tonnes in containers.

81. The study also found that there were prospects for increasing the agro-based (these already exist and have a niche market on the subcontinent) and refrigerated agro-produce export industries in Bhutan. Provided that the dry port is established, it will be possible to tap markets in South-East Asia and the Middle East.

82. An investment of about US$ 3 million was seen to be required in the first phase (of three phases of this project). The financial internal rate of return was about 13 per cent, while the economic rate of return was a little higher. Both were found to be robust in a series of sensitivity tests. The study recommended that the private sector should be the principal actor in the operation and management of the dry port and that RGoB should have a supportive and enabling role.

83. To establish a dry port in Bhutan the Government may need to use an experienced dry port and container business developer and operator who would focus on establishing the dry port and establishing the transport links with CONCOR, particularly arrangements for transfer to the Indian railway system immediately south of the Bhutan-India border. The first phase of the project would also be used to develop expertise in Bhutan in managing a dry port and other related activities, particularly those clearing and forwarding.

84. Customs procedures and documentation were proposed for the dry port. The main change recommended was the use of electronic transmission of documents with EDIFACT from the very beginning to allow the dry port to keep pace with international developments. This would also rapidly allow the introduction of TIRs.

85. Unusually heavy floods in the autumn of 2000 have affected the chosen site for the dry port at Phuentsholing. While alternatives (including training works on the abutting river) are being considered, RGoB is currently seeking assistance in mobilizing resources to implement this project and its initiative should be supported.

5. Improvements in transport links

86. Besides being landlocked, Bhutan does not have any railway line and is served by one airport at Paro. As mentioned earlier, Phuentsholing is connected to the Indian national highway system on the southern side. Calcutta Port can be reached through this system and is located at a distance of 775 km from Phuentsholing. Generally, the

condition of the highway is reasonable. The nearest railhead is at Hashimara on the Indian side of the border 30 km from Phuentsholing. It is on a metre gauge line to Siliguri. The nearest broad gauge (1576 mm) connection is at Falakatta, 60 km. away. However, as a result of uni-gauge railway conversion policy being implemented in India, Hashimara will shortly also be on the broad gauge network.

87. Transport links were reviewed in the context of the dry port traffic forecasts. It is envisaged that container throughput in 2017 will be about 23,000 TEUs in the import direction. This is equivalent to about 500 containers a week. The initial traffic, in two year's time, will be about an eighth of this. This would not justify building a railway link to Bhutan from the existing Indian railway network. However, in the context of the SAARC framework of cooperation, a spur to Phuentsholing could be considered.

88. It is unlikely that this will occur in the next ten years and the rail link is not a precondition for the development of the dry port. Ideally, until full load train traffic is available, container trains running to Amingaon ICD at Guwahati should have wagons for Bhutan traffic on particular days. These wagons should be dropped off at a designated interchange point either at Hashimara or Alipurduar. A modal change between road and rail should be effected with a crane or reach stacker. The short road haul will be an attractive business for Bhutan transporters.

89. Another aspect of SAARC cooperation would be the opening of hitherto moribund rail routes between India and Bangladesh. This could provide Bhutan's dry port with improved rail access to Calcutta and also give it easier access to the Bangladesh ports of Mongla and Chittagong. Within Bhutan, any improvement made to the main roads and to the internal links will assist in internal distribution and collection.

Annexe 1: Sketch map of Nepal and environs

Annexe 2: Sketch map of Bhutan and environs